

Claim 38: The isolated extrachromosomal nucleic acid molecule of claim 36, having the nucleotide sequence set forth at SEQ ID NO: 1.

Claim 39: The isolated extrachromosomal nucleic acid molecule of claim 37, having the nucleotide sequence set forth at SEQ ID NO: 11.

Claim 40: Expression vector comprising the isolated extrachromosomal nucleic acid molecule of claim 36, operably linked to a promoter.

Claim 41: Expression vector comprising the isolated extrachromosomal nucleic acid molecule of claim 37, operably linked to a promoter.

Claim 42: Prokaryotic cell or eukaryotic cell, transformed or transfected with the isolated extrachromosomal nucleic acid molecule of claim 36.

Claim 43: Prokaryotic cell or eukaryotic cell, transformed or transfected with the isolated extrachromosomal nucleic acid molecule of claim 37.

Claim 44: Prokaryotic cell or eukaryotic cell, transformed or transfected with the expression vector of claim 40.

Claim 45: Prokaryotic cell or eukaryotic cell, transformed or transfected with the expression vector of claim 41.

Claim 46: The prokaryotic cell of claim 42, wherein said cell is E. coli.

Claim 47: The prokaryotic cell of claim 43, wherein said cell is E. coli.

Claim 48: The eukaryotic cell of claim 42, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 14: The eukaryotic cell of claim 8, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 15: The prokaryotic cell of claim 4, wherein said cell is E. coli.

Claim 16: The prokaryotic cell of claim 15, wherein said cell is E. coli.

Claim 17: The eukaryotic cell of claim 4, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 18: The eukaryotic cell of claim 15, wherein said cell is S. cervisiae, PAE, COS or CHO.

Claim 21: The isolated ALK-1 protein, having the amino acid sequence set forth in SEQ ID NO:

2.

Claim 22: The isolated ALK-1 protein having the amino acid sequence set forth in SEQ ID NO:
12.

Claim 23: A method for determining if a substance is a ligand for an ALK-1 protein having the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 12, comprising contacting said substance with a cell which presents said ALK-1 protein on its surface, and detecting specific binding of said substance to said ALK-1 protein on the surface, wherein a substance that specifically binds to said ALK-1 protein is an ALK-1 ligand.

Claim 24: The method of claim 23 wherein said cell has been transformed or transfected with an isolated nucleic acid molecule which encodes said ALK-1 protein.